

Table of Contents

Power On/Off 3

- Pre-Startup Checks 3
- Power On for System 97/99 4
- Automatic Cold Start..... 5
- Wrong Power Off Procedure 6
- Auto Startup Program..... 7
- Power Off Procedure..... 9

Pendant..... 11

- Video ON/OFF Switch..... 11
- Optional Stop Switch 11
- Block Skip Switch 11
- Keylock..... 12
- Alternate NOEDIT Feature..... 13
- Positioning Read Out Display 13
- How to Display the Position Read-out:..... 14
- Axis Load Display 14
- Manual Data Input Display..... 15
- Large Format Display..... 15
- Modes 15
- Quick Keys Menu 16
- Edit Menu..... 16
- Functions Menu 16
- Using the Command Mode 16
- Cursor in the Command Mode 17
- Using the Delete Key 18
- Using the Menu Mode 19

Jog Mode..... 21

- Jog Using the Manual Pulse Generator 21
- Jog Using the Keyboard..... 22
- Jog Using the Remote Manual Pulse Generator 22
- Jog Using the Vector Jog for 5 Axis Head..... 23
- Single Step, Jog Away From..... 24
- Slide Hold, Jog Away From 25
- Waiting Stage, Jog Away From 26

Run Mode..... 29
Auto, Running a Program 29
Waiting..... 30
Changing Modes 30
Manual Pulse Dry Run 31
Dry Run 32
Single Step 33
Slide Hold..... 34
Mid-Tape (Program) Start 34

Emergency Stop..... 37
Emergency Stop 37

Formats..... 39
Formats 39
Changing Parameters..... 40
Saving Parameters 40
FORMAT 1 Parameter Settings 41
FORMAT 2 Parameter Settings 42
FORMAT 1 Program Example #1 43
FORMAT 1 Program Example #2 44
Notes on FORMAT 1 Style Programming: 46
FORMAT 2 Program Example 47
Notes on FORMAT 2 Style Programming: 49
Viewing the Software ID Number..... 50

Spindle 53
Manual Operations 53
Spindle, RPM Established from MDI 54
Using the Spindle ON/OFF Button 55
Spindle, Loading a Holder from the ATC 55
Spindle, Unorient to Turn by Hand 55
Spindle, Orient 56
Spindle Reversed While Using Jog 57

Tool Changer..... 59
Turret (ATC), Open for Loading; Using the TC,1 Command..... 59
Tool Changer Crash 59
Turret Loading, Putting Tools in the Tool Changer 60
Turret (ATC), Establish Tool Order; Using the SETTO Command..... 61

Coolant 63
Using the Coolant 1 and Coolant 2 Buttons 63
Coolant-Through Spindle 63

Commands 65

- Command Use Summary 66
- Viewing Error Messages 68
- AU COMMAND 68
- BL COMMAND 69
- CD COMMAND 71
- CH COMMAND 72
- CO COMMAND 75
- CS COMMAND 75
- DE COMMAND 76
- DNC COMMAND 76
- Direct Numerical Control, Using a Server Program 77
- FO COMMAND 78
- Viewing the Fixture Offset Table 80
- Changing the Fixture Offset Information 81
- IN COMMAND 81
- LE COMMAND 83
- LI COMMAND 85
- MD COMMAND 86
- ME COMMAND 87
- NE COMMAND 87
- NU COMMAND 88
- PA COMMAND 88
- Program Editing Using PA 88
- Background Edit 89
- To List The Program 90
- To Insert Between Lines 90
- To Search The Program 91
- To Change a Line 92
- To Delete a Line 92
- To Run a Single Line From the Program 92
- To do a Direct Mid-Program Start 93
- PR COMMAND 93
- To Use the Program Library Menu: 94
- RI COMMAND 95
- USING THE SETTO COMMAND 96
- SETP COMMAND 96
- CS COMMAND 97
- Establishing part home using an edge finder: 97
- Establishing part home using an indicator: 98
- SETH COMMAND 99
- SL COMMAND 99
- Tool Length Offsets, Purpose and Use in Program 101
- SP COMMAND 102
- SU COMMAND 102

TA COMMAND	105
Adding a Program to the End of the Program in Memory	107
Output, to Tape Punch or Computer	107
TC,1 COMMAND	108
Tool Changer Crash	108
Turret Loading, Putting Tools in the Tool Changer	109
TO COMMAND	110
UT COMMAND	110
VT COMMAND	113
CNC 88HS GRAPHICS MENU	113
Plotting Options	114
Index.....	117



Operator Manual

This reference covers the following Vertical Machining Centers:

VMC-15
VMC-15XT
VMC-2016L
VMC-2216
VMC-2216HT
VMC-3016
VMC-3016L
VMC-3016HT
VMC-3020
VMC-4020
VMC-4020HT
VMC-4020A
VMC-4525
VMC-5020A
VMC-6030
VMC-8030



© Copyright 2001 Fadal Machining Centers.
All rights reserved.